CHAPTER I
INTRODUCTION

A. Background

In the era of globalization, human resources become strategic resources to obtain sustainable advantages in an organization. Human resources (HR) are one of the essential factors that influence the development of organizations (Bhat, 2011). In the government organization, human resources is the State Civil Apparatus (ASN), have a crucial role in the implementation of the main tasks and functions of the bureaucracy. ASN is a dominant determinant of public service performance performed by bureaucratic institutions. It shows evidence that the dynamics of the achievement of service delivery and public policy are highly dependent on the quality of the ASN.

The slow condition of the bureaucracy in responding to service need and public policy is a problem that cannot be separated from the capacity of the ASN as human resources. The quality of the capacity of the civil service personnel does not maximally contribute yet to the slow performance of bureaucratic public services and performance (Sunaryo & Cicellia, 2014). Bureaucracy in Indonesia still faces domestic problems, such as bad service to the community, and bureaucratic politicization mainly occurring since the era of decentralization and regional autonomy, which can sometimes threaten the integrity of national unity. On the other words, our bureaucracy is not yet professional to be able to carry out

its duties and functions correctly. This conveyed by Fatimah and Irawati (2016) in the management module of the ASN.

Therefore, an organization needs a human resource management (HRM) design, so the organization can utilize HR effectively. Human resource management is an essential instrument for government organizations or non-governmental organizations that bring together work plans with achievements for an organization. The purpose of HRM is to increase the effectiveness of the organization to achieve organizational goals (Purnomo, 2016).

In an HRM, there is a function of human resource development (HRD). Thus, this is a relatively new term as the best way to prepare staff and organizations based on organizational development activities, career development, and training and development. Hence, human resource development is part of HRM, and it is an essential strategy of the company because it plays a role in improving employee behavior, and general performance for individuals and organizations (Alhalboosi, 2018). In this research, the focus is on education and training (DIKLAT) as one of the programs of human resource development.

DIKLAT are one of the efforts to face global challenges in order to build a professional development of ASN and increase its competence through education and training (AK Helena, 2009). In the government regulation Number 101 of 2000 concerning Education and Training of ASN, it is stated that with the implementation of education and training, it is expected to create apparatus resources that have the competencies needed to improve professionalism, service attitudes, loyalty to the

struggle of the nation and state, the spirit of unity, and the development of the insight of ASN.

As stated by Nassazi (2013), current growth and development are not only caused by the technological improvements or a combination of factors of production but also efforts to increase the development of the organization's human resources. Therefore, it is the responsibility of every organization to improve employee work performance. Because if the ASN employed has limited ability, productivity will also limit along with the ability and quality. According to Simmamora (2004) in Ardani (2017), factors used in measuring work productivity include work quantity, work quality, and timeliness.

Besides, in order to create a professional bureaucracy in facing these challenges, the government, based on the Law Number 5 of 2014 concerning State Civil Apparatus, has determined to manage the ASN to become more professional. This law is the basis in the management of the ASN which aims to build ASN who has integrity, is professional and neutral, is free from political intervention, is also free from corruption, collusion, and nepotism (KKN) practices, and can provide quality public services for the community. Based on the explanation of the law, each agency is required to manage HR, namely the state civil apparatus (ASN) by considering the management of the ASN in their agency.

The State Personnel Agency (BKN) released the statistics on ASN in Indonesia on December 31, 2018. Based on the data, it is states that the number of ASN on December 31, 2018, was 4,185,503 with details of 939,236 ASN serving

in Central Agencies (22.44 percents) and 3,246,267 ASN serving in Regional Agencies (77.56 percents). From that data, the distribution of ASN with the highest number was in Java with a percentage of 20.64 percents or equivalent to 1,209,036 (Badan Kepegawaian Negara, 2019). Meanwhile, the number of ASN in 2017 was 4,280,000 employees. This amount is based on the data from the BKN published by Central Bureau of Statistics (BPS) consisting of 2.139 million male ASN (49.95 percent) and 2.144 million female ASN (50.05 percent). Based on the ASN Law, several factors influence the decrease and increase in the number of ASNs, including 1). Pension and passed away 2). Resign, and 3). Involve in a case and several other factors.

Furthermore, in the Special Region of Yogyakarta Province (DIY), there were 83,715 male and female ASN seen from the data on population based on the type of work in the second semester in 2017. While for the Yogyakarta City Government, there were 12,336 male and female ASN seen from the total data population based on type of work in the second semester in 2017 (Pemerintah Provinsi Yogyakarta, 2017). If it is seen from the large number of ASN, it is certainly expected to play an essential role in the government bureaucracy and professionalism. As explained in the Law Number 43 of 1999 concerning amendments to the Law Number 08 of 1974 which concerns the Principal Personnel, staffing is employees who domiciled as elements of the ASN whose their duty is to provide services to the public in a professional, honest, justice and equitable in the implementation of the tasks of the state, government, and development. In the effort to improve the quality of existing employee performance,

it needs to be supported by engaging the role of HRM, building a culture of work discipline, providing motivation and increasing the ability of HR as the responsibility for the authority inherent in the primary duties and functions of each employee (Jaenudin & Chairunisa, 2015).

DIY in terms of DIKLAT for ASN nominated in 5 provinces with the best national education institution category in 2019 along with other provinces, including Central Java, West Java, North Sulawesi, and South Kalimantan. The best nomination category is given by the Head of the State Administration Institution (LAN) in commemoration of the 62nd Anniversary of the State Apparatus Institution of the Republic of Indonesia. This year's assessment focuses on the aspects of the utilization of information technology in the era of the industrial revolution 4.0, with the theme "Learning Center for the 4th Industrial Revolution" (solopost.com, 2019). With Jogja categorized as a nominee in one of the provinces with good ASN DIKLAT, the researcher is interested in researching what the relationship between DIKLAT related to employee productivity in which DIKLAT is one of the efforts in HRM in terms of human resource development.

In this study, researcher took locations in the office of the Personel Agency for Education and Training (BKPP) of Yogyakarta City. Initially, the BKPP is the Yogyakarta City Regional Personnel Agency (BKD) regulated in the Yogyakarta Mayor Regulation No. 62 of 2008 concerning the functions, details, tasks and work procedures of the Regional Personnel Agency in Yogyakarta City, which subsequently changed several articles in it. The amendment took the form of the Mayor Regulation Number 102 of 2009, the Mayor Regulation Number 29 of 2011,

and the Mayor Regulation Number 42 of 2016. Then, the Yogyakarta Mayor Regulation Number 62 Year 2008 concerning function, details, tasks, and work procedures of the Yogyakarta City Regional Personel Agency was revoked and replaced with the Yogyakarta Mayor Regulation Number 66 of 2016 concerning the organizational structure, position, tasks, functions and work procedures of the Yogyakarta City Personnel, Education and Training Agency (BKPP).

According to the Yogyakarta Mayor regulation Number 66 of 2016, the BKPP has the task of supporting the implementation of regional government affairs based on the principle of autonomy and assistance tasks in the field of staffing, education, and training. In the implementation of government affairs and the application of tasks and functions of an organization to achieve maximum goals, it is necessary to increase productivity in an employee performance. Efforts that have been taken by the government in improving the quality of professionalism and developing insights for ASN are through DIKLAT program (Aziz, 2016). Besides that, BKPP is a data center for employees of the Yogyakarta City Government who has the vision to realize the professional, accountable, and prosperous Yogyakarta State Government Apparatus (bkpp.jogjakota.go.id, n.d.). Therefore, it can be pointed that the management of the ASN in the BKPP office is a model for several other agencies.

Furthermore, there is also previous research conducted by (Febria, 2017) in the BKPP office of Yogyakarta City entitled *Implementasi Pelatihan dan Pengembangan Sumber Daya Manusia Oleh Badan Kepegawaian Pendidikan dan Pelatihan (BKPP) Kota Yogyakarta 2017*. Based on the Febria's research, it

describes how the training method is implemented and what the stages of the DIKLAT are, but it has not been described yet how the DIKLAT relation is to employee productivity. Besides that, Febria stated that in the office of the BKPP, by organizing DIKLAT, there is a department conducting DIKLAT, namely the DIKLAT department. Within a year, the department of DIKLAT should be organized minimum 20 types of DIKLAT.

Based on some previous descriptions, the researcher is interested in conducting a study in order to find out the relationship between DIKLAT and ASN productivity held by the Department of DIKLAT in the BKPP office of the city of Yogyakarta to the productivity of its employees. This study describes how the relationship between DIKLAT carried out by the department of DIKLAT is intended for employee work productivity specifically and the organization in general. Thus, the organizational goals can be achieved as expected. This study focuses on technical DIKLAT organized by BKPP of Yogyakarta City because BKPP is the organizer and facilitator of the technical DIKLAT for ASN in the city of Yogyakarta. Whereas, for other types of DIKLAT, BKPP can be a facilitator and can send ASN to attend DIKLAT to the Guidance agency as the organizer of DIKLAT which is authorized to hold the Leadership DIKLAT. For functional DIKLAT BKPP can be a facilitator and cooperate with the guidance agency. Meanwhile, for having leadership DIKLAT BKPP can send ASN to attend DIKLAT to the guidance agency as the organizer which have the authority to hold the DIKLAT.

This research uses descriptive qualitative approach. The study was conducted by interviewing informants related to research, including those who are selected as key informants such as the Head of BKPP DIKLAT department who also as temporarily secretary of BKPP, the head of sub-division of DIKLAT department, as well as some of the employees of BKPP who joined DIKLAT held by BKPP Office in Yogyakarta City especially in 2018. Then, the findings of the interviews with some of the resource people and some other supporting data are explained in descriptive paragraphs.

B. Research Question

Based on various reasons and previous explanations, the focus in this study is to answer how is the relationship between DIKLAT on ASN productivity in the Yogyakarta City BKPP office?

C. Research Objectives

1. To find out the relationship between education and training (DIKLAT) on ASN productivity in the Yogyakarta City BKPP Office in 2018.

D. Research Benefits

1. Theoretical Benefits: This research is expected to be able to contribute directly or indirectly and provide benefits to the Government Studies and Political Studies literature as well as thought and insight contributions that are useful for further research and government institutions, especially about the ASN.

2. Practical Benefits: This research can be used as the input/evaluation in policies regarding the development of the ASN and work productivity at the BKPP Office in Yogyakarta City.

E. Literature Review

The literature review is the previous research study related to the topic. Some previous studies have become literature studies and can be a reference for this research.

First, Irmawati (2015), researched about *Peran Human Resource Development (HRD) Dalam Meningkatkan Produktivitas Karyawan Di PT. Yanasurya Bhakti Persada.* The research used the qualitative description of the problems that arise in planning and developing human resources in manufacturing companies. The results of the research were that HRD plays a role in preparing and selecting labor or preparation and selection, developing and evaluating employees, providing compensation and protection on employees, the relationship between management and employee, conducting training and management of personal development, and performance appraisal. Another result is that there was a significant relationship between job satisfaction and work productivity. It was that the more the employee received job satisfaction, the higher productivity will be.

Second, Musaddad (2016) conducted a study entitled *Produktivitas Aparatur Sipil Negara Dinas Pekerjaan Umum Kab. Bantul pada tahun 2015.* The research method used is the quantitative research method, and the data were explained with descriptive paragraphs. The results showed that the productivity of

Bantul Regency Public Works Department (DPU) employees has been categorized as useful. Where the productivity dimension has been seen from work effectiveness which leads to the achievement of targets based on quantity, quality and time as well as in terms of the dimensions of work efficiency. The factors influencing the productivity of the ASN in the DPU of Bantul Regency showed that the knowledge contained in the DPU is already high as evidenced by the absence of employee confusion over the tasks assigned, high experience especially routinely conducting pieces of training in accordance with the needs in order to boost performance employees and evenly experienced in their fields.

The third, related study is Wardani (2016), in which conducted a research entitled "*Pengaruh Diklat Terhadap Produktivitas Kerja Dinas Pangkajene dan Kabupaten Kepulauan*." The DIKLAT had a significant effect on the work productivity of the ASN in the Pangkajene and Kepulauan Regency Education Services. It was based on the work productivity of the Pangkajene and Islands District Education Office which increased after attending the training.

The fourth, Febria (2017) researched about *Implementasi Pelatihan dan Pengembangan sumber daya manusia oleh BKPP Kota Yogyakarta Tahun 2017*. This research discussed the implementation of DIKLAT, but it did not discuss more deeply the influence of DIKLAT itself. There are several steps taken by the BKPP before conducting training and development, namely looking at job analysis, then looking at the training needs of each position, and distributing questionnaires to each OPD. After which the results of the questionnaire are analyzed based on the most urgent needs, and then can know the types of training held. The stages carried

out by BKPP are identifying training and development, setting goals and objectives, setting success criteria, establishing training methods, and implementing them.

The fifth, Ardani (2017) found several phenomena or symptoms that showed the decrease of ASN work productivity in the office of the Regional Personnel, Education, and Training (BKPPD) of Samarinda City. This can be viewed from the still lack of effort from the ASN to complete the task on time and with good quality, lazy work attitude, and lack of discipline in the apparatus. The research was entitled *Pengaruh Pendidikan dan Pelatihan (DIKLAT) dan Tingkat Pendidikan Terhadap Produktivitas Aparatur Sipil Negara Di Badan Kepegawaian, Pendidikan dan Pelatihan Daerah (BKPPD) Kota Samarinda*. The data collection was carried out through library research, observations, and questionnaires. The data collected is compared and analyzed with quantitative analysis. The results of the research found that simultaneously, there was a positive and significant influence on DIKLAT and education level on the productivity of the ASN in the BKPPD of Samarinda City.

Then, organizations need to design their human resource management in a way that is appropriate to the organizational structure because it makes the organization achieve its goals and objectives. Human resource management in Africa in general and Uganda, particularly, is also rather challenging because most organizations have difficulty finding the right human resources (Nassazi, 2013). In his study entitled "The Effect of Training on Employee Performance," the findings reported in this study indicate that training and development have an impact on

employee performance related to their work. These results are broadly consistent with the previous management literature on training and development.

Moreover, organizational performance is significantly determined by the training given to employees, or on the other words, training is an essential part of the performance (Bhat, 2011). Bhat examined *The Impact of Training on Employee Performance: A Study of the Retail Banking Sector in India*. He found that organizational performance depends on employee commitment in which turn depends on HR training and development policies. It is stated convincingly that training mostly leads to improve employee performance, but it is still not the only factor that leads to excellent performance, but rather it a combination of factors. Besides that, the role of managerial and leadership factors also supports employee performance.

Furthermore, the eighth related study was conducted by Nababan, Tawas, and Uhing (2016) entitled *Pengaruh Pendidikan dan Pelatihan Kerja Terhadap Kinerja Karyawan PT. PLN (Persero) Area Manado*, it showed that education partially does not significantly influence employee performance at PT. PLN Manado. However, the training partially has a significant effect on employee performance at PT. PLN Manado. The effect of training on employee performance is the biggest. The type of research is associative research or the relationship with data collection analysis with multiple linear regression methods.

Besides that, a study entitled *Pengaruh Pendidikan Dan Pelatihan, Remunerasi Dan Budaya Organisasi Terhadap Kepuasan Kerja Dalam*

Meningkatkan Kinerja Pada Dit Reskrimsus Polda Riau, by Riana, Hendriani, and Efni (2018), it was found that DIKLAT do not have a real impact in improving performance because personnel is not interested in participating in the training because training is not a benchmark for the promotion of positions that can improve personnel performance. The research design used was an analytical, quantitative research approach. The population of the research is the Riau Police Criminal Investigation personnel, as many as 93 people. The samples were taken by census technique by issuing Director of Dit Reskrimsus as key informants. The variable data collection using a questionnaire with a likert scale.

From some of the previous studies mentioned above, many studies have conducted related to human resource management, especially in terms of DIKLAT and productivity, produce positive findings and some show results that are not significant or negative. However, the difference of focus on each of these studies leads to positive results in different contexts and focuses as well as the different factors that influence it. Besides that, most of the previous studies use a quantitative approach. Therefore, the researcher is interested in researching the same theory, but it is with different focus and objects and with different approaches. Furthermore, in this study, the researcher uses qualitative approach, and then focuses on and aims to determine the relationship between DIKLAT on employee productivity at the Yogyakarta City BKPP Office.

F. Theoretical Framework

1. Human Resource Management (HRM)

Human resources are assets in all aspects of management, especially those concerning the existence of the organization (Bukit, Malusa, & Rahmat, 2017). According to Bappenas (2010), HR, collaboration, participation, and the results of activities are the factors that influence the level of productivity. Among the various types of resources, HR is the essential element. To plan, manage and control HR require a managerial tool called human resource management (HRM) (Priyono & Marnis, 2008).

The useful HR depend on how local governments carry out HRM and what models or types of HRM are appropriate for public organizations. The organizational structure of HR is needed, so the organization runs well and efficiently (Purnomo, 2016). Gary Dessler expressed the other opinion in the fourth edition of his book entitled Human Resource Management, he defined HRM as a process for obtaining employees, training employees, evaluating employees and compensating employees, and for managing their work relationships, their health and safety and matters related to their justice and welfare (Dessler, 2017).

Whereas, in its understanding as a policy, HRM is intended to maximize the effectiveness of the organization in achieving its objectives. In this context, HRM is defined by Guest in (Priyono & Marnis, 2008) with the following description; "Human resource management (HRM) consists of a series of policies designed to aim at producing maximum results in terms of organizational integration, employee

commitment, flexibility, and quality of work. "According to Guest, the policy adopted by the organization in managing its HR is directed at the unification of organizational elements, employee commitment, organizational flexibility in operating as well as the achievement of maximum quality of work output (output). It is related to employee productivity.

The next opinion is based on to Byars and Rue (2000), HRM includes all activities designed to coordinate HR in an organization. The HR function is carried out by the owner or manager of operations. An operation manager is someone who manages people and is directly involved in the production process of an organization. Therefore, to achieve the HR goal, an organization requires to get close coordination between the human resources department and operations manager.

Based on some of the definitions above, it can be concluded that HR is one of the essential parts in an organization that influences productivity. HR can contribute effectively and efficiently in achieving the goals of an organization in order to produce maximum output with the support of HRM. HRM can play a role in managing and coordinating human resources and matters relating to the safety and welfare of HR.

1.1 Human Resource Management Functions

Edy Sutrisno in the book of Human Resource Management of Bukit, Malusa, and Rahmat (2017) defines the functions of HRM as follows:

1) Planning is used in organizations to be more productive and efficient.

2) Organizing is such activities to regulate employees by establishing division and work relations, the delegation of authority, integration, and coordination in the form of organizational charts.

3) Direction and procurement. Direction gives instructions to employees, so they want to work together and work effectively and efficiently in helping the achievement of organizational goals. Meanwhile, procurement is a process of withdrawal, selection, placement, orientation, and induction to get employees following organizational needs.

4) Control. Therefore, employees obey the rules of the organization and work according to plan.

5) Development. It is to improve employee skills through DIKLAT.

6) Compensation. It represents the payment of services to employees in return.

7) Integration. It is to unite the interests of the organization and the needs of employees, to create profitable cooperation.

8) Maintenance. It is aiming at maintaining physical, mental, and loyalty conditions so that they will continue to work until they retire.

9) Discipline. It is as a key to achieving maximum goals.

10) Termination. It is the severed employment relationship of an employee of an organization.

Then, according to Werner, Jon and DeSimone, (2011), HRM can be divided into primary and secondary functions. The main function is directly involved with obtaining, retaining, and developing employees. The secondary

function provides support for general management activities or is involved in determining or changing organizational structures.

From the above definition, it can be concluded that the functions of HRM are implementing and managing human resources appropriately, such as planning, recruitment / selection, development (education and training), and assessment. for the organization / company, so organizational functions can run in a balanced, effective and efficient way to achieve the goals that have made and can be developed and maintained.

1.2 Objectives of Human Resource Management

Based on the Human Resources Management book compiled by a team of HRM lecturers at the Industrial Engineering Study Program at Wijaya Putra University, the general objective of HRM is to optimize the use of productivity, which is the productivity of all workers in an organization. In this context, productivity defined as (output) of a company against the entry of resources (human, capital, materials, and energy). Whereas, the specific purpose of a human resources department is to help line managers or other functional managers to manage workers more effectively (Univesitas Wijaya Putra, 2009).

Meanwhile, according to Schuler et al (1992) in Priyono and Marnis (2008) at least HRM has three main objectives, namely improving productivity levels, improving the quality of work-life, ensuring that the organization has fulfilled legal aspects. A productivity is an essential organizational goal. In this case, HRM can play a role in increasing organizational productivity. Organizations that have

achieved high levels of productivity, there are should be unique HR practices exist (Priyono & Marnis, 2008).

1.3 Human Resource Development (HRD)

According to Alhalboosi (2018), the term human resource development combines several HRM functions based on activities (organizational development, career development, and training and development). In a company, there is a human resources department, to achieve the HR goals in the organization requires to get close coordination between the human resources department and operations manager (Byars & Rue, 2000).

Human resource development exists as a means of facing competition and a means of development for many organizations, including employee education, training, and development as an essential part of their organizational strategy (Werner, Jon & DeSimone, 2011). This definition is also mentioned by Bratton & Gold, 1999; Swanson & Holton, 2001; Vinesh, 2014. Moreover, Swanson defines HRD as "a process for developing and exploring human potential or expertise through training and organizational development and development to improve performance."

Table 1 the differences between HRM and HRD below based on

(Alhalboosi, 2018):

HRM	HRD
HRM is set practices through know what kind of HR people need? and how can people get to them? What did people do to them? To achieve goals.	HRD is a set of systematic activities to enrichment employees by skills, knowledge, and experiences (improve performance) to meet what are needs a current and the future to achieve the goals.
Include: HR Planning Recruitment & selection Training Compensation Development Career Development	Include: Organizational Development Career Development Training and Development

Based on the table 1 above, it can be distinguished HRM is more practical to manage HR while HRD is more systematic to improve employee skills and abilities. HRM is usually used to plan to recruit and select employees to enhance career development. Whereas, organization development, career development, and training development meant in HRD.

1.3.1 Training and Development

Training and development, according to Bukit, Malusa, and Rahmat (2017) can be defined as the planned efforts of the organization to improve employee knowledge, skills, and abilities. Training and development are two concepts, involving, to increase knowledge, skills, and abilities. Nevertheless, when it is viewed from the target, a training is more focused on increasing the ability to do specific work at this time, and a development

is more focused on increasing knowledge to do work in the future, which is done through an integrated approach with other activities to change work behavior (Bukit et al., 2017).

According to Gordon (1992) in Nassazi (2013), training is the type of activity that planned, systematic, and increased the skills, knowledge, and competencies needed to do the current job effectively. Then, according to Namara in Nassazi, development is a series of extensive multi-faceted activities (including training activities) aimed at bringing someone or organization to the threshold of another performance often to do some work or new role in the future (Nassazi, 2013).

To make it effective, training usually must include learning experiences, planned activities (be a planned organizational activity), and be designed as an answer to the needs that successfully identified. Ideally, training should be designed to realize the goals of the organization, while at the same time realizing the goals of the individual workers (Wardani, 2016). Training is essential to solve current problems, while employees need development to improve their situation to avoid future problems due to changes in the future (Alhalboosi, 2018). Alhalboosi also explained that there is a difference between training and development, but both of them complement each other, and the results aimed at achieving organizational goals.

Thus, it can be defined that training and development become a process that aims to develop and enhance human resources through continuing education to support those with core qualifications to carry out their functions effectively. The ongoing training and development aim to strengthen the ability of human resources to complete current and future tasks. The following table presents the component differences between training and development (Alhalboosi, 2018).

Table 2 The differences between Training and Development (Alhalboosi, 2018)

Dimensions	Training	Development
Goal	Transfer of necessary skills to the current trainees.	Development of general skills for trainees.
Focus	Focus on current job/tasks.	Willingness to accept the requirements of the new tasks.
Influence	On the current performance.	On the future performance.
Time	Short term: to focus on specific deficiencies.	Long term: to enrich employees' skills and a variety of tasks to address variables.
Level	Allocated to employees in administrative level as a whole.	Dedicated to management levels as a whole.
Requirement	It depends on the shortage or lack of skills.	Depend on special ambitions

Source: (Alhalboosi, 2018)

Furthermore, development and education are two different concepts, but they have interrelations that influence one another. The development can be done through education so DIKLAT become a vehicle for development. Meanwhile, education is a conscious and planned effort to create an atmosphere of learning and learning process, so students actively develop their potential to have spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation, and state (UURI No. 20 of 2003: 2). While training implicitly becomes part of education.

2. Education and Training (DIKLAT)

2.1 Definition of Education and Training

Education and training are one manifestation of the function of developing human resources. Priyono and Marnis (2008) explained that education itself is associated with the increased general knowledge and understanding of the environment. This is supported by (Basri & Rusdiana, 2015). DIKLAT is an effort to develop HR, especially in terms of developing aspects of intellectual abilities and skill. The use of the term Education and training in one institution is often called "DIKLAT".

Hereinafter, according to Mangkunegara (2017), DIKLAT is Efforts to increase knowledge and technical skills and development aimed at employees to improve employee capabilities. This effort was made to improve the productive contribution of workers in dealing with all the possibilities that occur due to

environmental changes. Meanwhile, in the Government Regulation No.101 of 2000, the meaning of DIKLAT in term of ASN position is the process of organizing teaching and learning in order to improve the ability of ASN. Education and Training covers two functions at once, namely the education function and the training function which are an inseparable unit.

From the various definitions above, it can be concluded that DIKLAT are efforts to develop HR in terms of increasing intellectual abilities of general knowledge and skills needed to support the performance and productivity of HR work in order to achieve the goals of an organization well for the present and the future.

2.2 Benefits and Objectives of Education and Training (DIKLAT)

Based on the Government Regulation Number 101 of 2000 concerning Education and Training of State Civil Apparatus (ASN) Position Article 2 and 3, that the DIKLAT aims to:

a. Increase knowledge, skills, and attitudes to be able to carry out operational duties in an operational manner based on the ethical personality of civil servants in accordance with agency needs,

b. Create apparatuses capable of acting as reformers and adhesives of national unity,

c. Strengthen the attitude and spirit of personality oriented to service, shelter, community empowerment.

d. Creating a common vision and dynamics of thinking in carrying out the tasks of government and development for the realization of good governance.

Furthermore, Siagian (1992) in Basri & Rusdiana, (2015) conclude the benefits of education, training, development for employees, as follows:

a) Help employees make better decisions;

b) Improve the ability of employees to solve various problems they face;

c) Internalization and operationalization of motivational factors;

d) The emergence of employees' encouragement to continue to improve their work abilities;

e) Increase employee's ability to deal with stress, frustration, and conflict that increases self-confidence;

f) The availability of information about various programs that can be utilized by employees in the context of growth;

g) Increase job satisfaction;

h) Increase recognition of one's abilities;

i) Increase the determination of workers to be more independent;

Besides being beneficial for the needs and personal, development activities are beneficial to the interests of the organization / institution. Education, training, and development are very beneficial for the needs of the organization.

2.3 Education and Training (DIKLAT) Components

According to Mangkunegara (2016), the goals and objectives of the training must be clear and measurable; Trainers must be qualified professionals; Training materials must be in accordance with the objectives to be achieved; Training and development methods must be adapted to the level of ability of the participating employees; Training participants must meet the specified requirements.

2.4 Stages of Education and Training (DIKLAT)

The stages of implementing DIKLAT are not the same in every institution, therefore it is necessary to arrange a training program stated by Lynton and Pareek in (Basu, 2012) namely:

a. Determine training needs which are the initial stages that must be determined, what is the most urgent and most relevant needed by trainees, including preparing instructors.

b. Setting the training objectives which can be used as a basis for determining the steps an instructor needs to take, which can then be used as a benchmark for evaluating the success of the training program.

c. Develop a training program to determine the level of achievement.

d. Carrying out training, before the institution starting the training must first have the methods used in the training, then only after that stage, secondly, thirdly really prepared.

e. Evaluation of training aims to see the success or failure of an effective and efficient training. Training Evaluation is a comprehensive

evaluation to assess the success of the training program, specifically related to success in achieving learning objectives or training objectives. Training evaluation does not only evaluate data and information after someone completes the training program, but training evaluation also collects and analyzes data and information before training participants take the training program, during training and after completing training and even during subsequent periods after finishing training.

2.5 Training Program Implementation Method

Sikula in Basri & Rusdiana (2015) suggested that the training method has 2 types of activities, namely on the job training and off the job training. Following is the description of on the job training and off the job training:

1. On the Job training, means that in this method the trainees directly work in the place to learn and imitate a job under the guidance of a supervisor.

    a) Vestibule, a training method carried out in class that is usually carried out by industrial companies to introduce jobs to new employees and train them and introduce the job.

    b) Demonstration and example, it is training methods by way of demonstration and explanation of how to do a job through examples or experiments that are demonstrated.

    c) Simulation is defined as a technique for copying as closely as possible to the true concept of the work to be achieved.

d) Appreniceship, which is an apprenticeship is a way to develop skills so employees can learn all aspects of the job.

2. Off the job training is a training that is conducted outside working hours or carried out when employees are not working carrying out their daily duties. Off the job training is carried out taking special time during which the employee undergoes training then the employee is released from his daily duties. There are the various methods in off the job training, including:

a. Classroom Methods, consisting of:

1) Lecture; this method is widely given in class.

2) Conference (meeting); the trainer gives a certain paper and participants participated in solving the problem.

3) Instruction program; where participants can learn independently because the working steps have been programmed through the computer, the instruction booklet.

4) Case Study; in this method where the trainer gives a case to participants.

5) Rol Playing, this method is done by appointing several people to play a role in a mock organization.

3. Productivity

3.1 Definition of Productivity

Generally, productivity implies a comparison between the results achieved (output) with the overall resources used (input). The productivity ratio can be

increased by adding more output in the form of an increase in certain resources (Salom, 2018). Productivity is also defined as the level of efficiency in producing goods or services. "Productivity expresses how to use it well to sources in producing goods." (Wardani, 2016). Work productivity is a symptom of employee achievement, where if the employee is productive, then it can be said that the employee has an achievement. Organizational productivity measures how well the organization functions and indicates the efficiency and competition of individuals or departments (Okoye & Ezejiofor, 2013).

Productivity, according to the National Productivity Council, has a meaning as a mental attitude that always holds that the quality of life today should be better than yesterday, and tomorrow must be better than today. The meaning of productivity is the will (the will) and human efforts to always improve the quality of life and livelihood in all fields (Purnama, 2013). Based on Sunyoto in Manik, Sudarmin, and Syafrina, (2018) also shared the same opinion.

Meanwhile, according to Sedarmayanti (2011), work productivity has two dimensions namely effectiveness and efficiency of the use of input sources, namely the first dimension is related to the achievement of maximum work, in the sense of achieving targets related to quality, quantity, and time. While the second dimension relates to efforts to compare inputs with the realization of their use, or how the work is carried out in this case is related to honesty and attitude. In other words, individual productivity is how a person performs his job or job performance."

Generally, based on some of the definitions above, it can be concluded that productivity is a matter related to the achievement of work by employees in a maximum manner effectively and efficiently in terms of quality, quantity and time and related to the implementation of work that is related to attitude. Productivity is a measure of what is obtained by what is needed. Employees play an important role in increasing productivity, because the means of production and technology are the result of how employees as human resources make good use of production resources.

In addition, human play an important role in themselves to produce productivity because it comes from the desire within themselves to have a better life and improve themselves every day so that tomorrow can do more or produce something better than yesterday and today. Productivity is obtained from the comparison of results achieved by employees with a certain period.

3.2 Factors That Affect Productivity

Many factors affect employee productivity, both originating from the employee itself and coming from the workplace environment (Wardani, 2016). Factors that Influence Labor Productivity according to Sedamaryanti in (Dewi, 2014) can be classified into six main factors, namely as follows:

a. Work attitudes, such as: willingness to work in turns, can accept additional assignments and work in a team.

b. Skill level, which is determined by education, training in management and supervision and skills in industrial engineering.

c. The relationship between workforce and organizational leadership and workforce to increase productivity through quality control circles and committees regarding superior work.

d. Productivity Management, namely efficient management of sources and work systems to achieve increased productivity.

e. Workforce efficiency, such as: workforce planning and additional entrepreneurial tasks, which are reflected in risk taking, creativity in doing business, and being on the right track in business.

The other opinions regarding the factors that affect productivity are according to Sutrisno in (Manik, Sudarmin; Syafrina, 2018). Several factors affect employee work productivity, namely:

1) Training. Job training is intended to equip employees with the right skills and ways to use work equipment, as well as to provide a foundation of knowledge.

2) Mental and physical abilities of employees. It is very important because physical and mental conditions have a close relationship with employee work productivity.

3) The relationship between superiors and subordinates. It will affect the activities carried out daily. About how do superiors look at employees, the extent to which employees are included in setting goals. Factors that can influence.

Besides that, apart from those proposed by Sedarmayanti and Sutrisno above, Sinungan (2003) cited in Indriyani (2014) mentioned six main factors that affect productivity including education and training, nutrition and needs, income and social security, opportunities, managerial leadership capacity enhancement, and government policy in the field of production.

From all the explanation above, it can be concluded that productivity is contained in the ability to produce something better than before with efficient and effective quality results. This ability is obtained not only from efforts and desires in every human being, but must be supported by other factors, namely the management of human resources in the organization where they work and the environment in which they work and the support of the government in the form of policies on production.

3.5 Productivity Indicators

Productivity is very important for the employees in the company. With work productivity, it is expected that work will be carried out efficiently and effectively, so this is ultimately needed in achieving the goals set. To measure work productivity, according to Sutrisno (2015) in (Manik, Sudarmin; Syafrina, 2018) an indicator is needed, as follows:

a) Ability: it means having the ability to carry out tasks is very dependent on the skills possessed by employees and their professionalism at work.

b) Increase the results achieved: Trying to improve the results achieved. Thus, efforts to utilize work productivity for each involved in a job.

c) Work spirit: this is an attempt to be better than yesterday. This indicator can be seen from the work ethic and the results achieved in one day later compared to previous results.

d) Self-development: develop ASN to improve work skills. Self-development can be done by looking at the challenges and expectations with what will be faced. Because the stronger the challenge is, self-development is necessary. Likewise, the hope to become better in turn will greatly affect the desire of employees to improve their abilities.

e) Quality: trying to improve ASN's quality is better than the past. Quality is the result of work that can show the quality of work of an employee. So, improving the quality to provide the best results which in turn will be very useful for the company and itself.

f) Efficiency: comparison between results achieved and overall resources used. Input and output are aspects of productivity that have a significant effect on employees.

Meanwhile, according to (Simmamora, 2004), indicators of work productivity or factors used in the measurement of work productivity include work quantity, work quality and timeliness. There are explained as follows:

1) The quantity of work is a result achieved by employees in a certain amount with a comparison of existing standards or determined by the company.

2) Quality of work is a standard of results relating to the quality of a product produced by employees in this case an employee's ability to

complete work technically with a comparison of standards set by the company.

3) Timeliness is the level of an activity completed at the beginning of the specified time, viewed from the point of coordination.

G. Conceptual Definition

a. Human Resources Development

Human resources are used in an organization that can contribute effectively and efficiently to the role of HRM in planning, recruitment, training and development as well as matters related to the safety and welfare of human resources to achieve the goals of an organization.

HRD is one of the functions of HRM and is defined as a process for developing and exploring human potential or expertise through career development (education and training) and organizational development for the purpose of improving performance.

b. Education and Training (DIKLAT)

Education and training are the effort to develop HR in terms of increasing the intellectual abilities of general knowledge and expertise capabilities needed to support the work performance and productivity of HR in order to achieve the goals of an organization well for the present and the future.

c. Productivity

Work productivity is a comparison between output produced by employees and input provided by an organization or company and the role of labor per unit of time.

Productivity in an organization between the ability to absorb information (by means of training, education and others) should be in accordance with what is produced.

H. Operational Definition

Operational definition is an element of research that tells how to measure a variable in which on the other words, it is a kind of implementation instructions on how to measure a variable. The measurements are made to determine the relationship of DIKLAT to the productivity of the ASN at the BKPP Office of Yogyakarta city. The complete description of these variables and their measurements, it can be seen in the following table.

Table 3 Operational Definition

Variable	Dimension	Indicators
Education and Training (DIKLAT)	Efforts to increase knowledge and technical skills and development aimed at employees to improve employee capabilities. (Mangkunegara, 2016)	- Aims and objectives: The aims and objectives of the training must be clear in accordance with the nature of DIKLAT itself, related to the vision and mission of the organization and beneficial for employees. - Trainers: The trainers must be professional ie qualified and adequate experts.

		- Training materials: Training materials must be in accordance with the objectives to be achieved. - Training and development methods: the training and development methods must be adjusted to the level of ability of the participating employees. - Training participants: The participants must meet the specified requirements
Productivity	Productivity has two dimensions, namely effectiveness and efficiency. The first dimension relates to achieving maximum performance, in the sense of achieving targets related to quality, quantity and time. While the second dimension relates to efforts to compare input with the realization of its use or how the work is carried out in this case relating to attitude. (Sedarmayanti, 2009:58)	- Quantity: i.e. the task that completed. This related to the amount of output produced. - Quality: That is the quality produced. Qualitative measurement of output (output) reflects "level of satisfaction", ie how well the completion of a job. - Timeliness: i.e. completion of an activity or task in accordance with the planned time (target). - Attitude is to support the company's vision and mission sincerely, related to discipline and responsibility.

I. Research Methods

This study used qualitative method. Qualitative research is also called naturalistic research because the research is carried out in natural conditions (natural setting) where the researcher is the vital instrument, and the opposite is

(experimental) (Sugiyono, 2016). The qualitative research has two main objectives, namely: 1) to describe and express (to describe and explore) and 2) to describe and explain (to describe and explain) (Bachri, 2010).

1. Type of Research

According to Marshall and Roman (2011) cited in (Creswell, 2013), there are four approaches in the qualitative research, including descriptive research, exploratory research, analytical research, and emancipatory research. This research is field research to discuss the relationship between DIKLAT for ASN. The researcher uses qualitative descriptive method research approach. The descriptive research method is a method used to look for the elements and characteristics of a phenomenon. The phenomenon can be in the form of relationships, activities, characteristics, changes, and differences between two or more phenomena. This was method started from collecting data, analyzing data, and interpreting it (Suryana, 2010).

Principally, descriptive research does not aim to form hypotheses or develop theories. The main characteristic of this method is that the researcher has no control over the variables; The researcher can only report what happened. Another characteristic of descriptive research is objectivity or neutrality. Descriptive research is about describing how reality is. In this case, descriptive research differs from prescriptive research, which mainly deals with questions about how reality should be (Voordt, 2002). The data is collected frequently using surveys and observations.

In qualitative design, there are also viable ways to conduct qualitative studies such as narrative research, phenomenological research, ground theory, ethnography, and case study. The researcher uses qualitative approach because the researcher wants to broaden the theory and to differentiate from the previous research. Besides that, the previous research mostly examines the theory by using quantitative research approach. Therefore, because this research is a case study which the researcher develops an in-depth analysis of a program namely DIKLAT in BKPP Office of Yogyakarta City whether it has any relation to the employee's productivity or not. The case study is based on the explanation stated by (Sugiyono, 2016) which the design of inquiry is found in many fields, especially evaluation, in which the researcher develops an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals. The cases are bounded by time and activity, and the researcher collect detailed information using a variety of data collection procedures over a sustained period of time (Stake,1995; Yin, 2009, 2012) in (Cresswell, 2014).

Meanwhile, based on data sources, this research is categorized into field research where research is conducted where phenomena or problems occur. (Hasan MI, 2012,p.11). This study aims to find the relationship between Education and training for the ASN in the productivity of the ASN in the BKPP Office of Yogyakarta City.

2. Types of Research Data

The researcher obtains the data from interviews and literature studies by collecting data from books, journals, academics, articles, and other sources related to this study. In this study, interviews were conducted with the key-informant method. This method aims to interview certain people. (Sugiyono, 2016).The interviewers are those who are related to the research.

In collecting data, the researcher obtained the data from several data sources, including:

a) Primary Data

Primary data is data sourced from informants who know clearly and in detail about the problem under study. While informants are people who are willing to provide information about situations and conditions that are used as research objects (Moleong, 2010). In addition, primary data can also be interpreted as data sourced from humans. In collecting data, the researcher used a voice recorder or write the answers from the informants in the interview. The results of the interviews were collected which then, it was analyzed concluded by the researchers.

In this study, the primary data source came from key informants that chosen by using purposive sampling. According to Sugiyono (2016), purposive sampling is a technique for sampling data sources with certain considerations. For example, the person is considered to know best about what people expect or as a holder of certain positions, so it makes it easier for the researcher to explore the object under study. Then, in qualitative

research, the determination of the sample is not based on statistical calculations. Another characteristic of purposive sampling is that the determination of the sample can be done when the researcher starts entering the field and during the research (emergent sampling design) (Sugiyono, 2016).

The key informants are some of ASNs who have attended DIKLAT especially in 2018, head of DIKLAT department and also as a temporarily secretary of BKPP, head of sub-division of ASN control and development, head of sub-division of DIKLAT organizer, and any others additional informants that related to this topics. The list of informants shows in the table below:

Table 4 List of Informants for Primary Data

No	Informants	Positions
1.	Sukidi, S. E, M.Si	Head of DIKLAT Department and as a temporarily secretary of BKPP
2.	Jiman, S.H.	Head of ASN mutation and coaching department (DIKLAT Alumni 2018 & a supervisor of Andriana)
3.	Ary Iryawan, S.IP.	Head of ASN development department (DIKLAT alumni 2018)
4.	Dra. Indah Setiawati	Head of DIKLAT organizing sub-division
5.	Hayu Sukiyoprapti, S.H.	Head of DIKLAT control and development sub-division
6.	Andriana Widiantari, S.Psi., MPA.	Head of mutation sub-division (DIKLAT Alumni 2018)
7.	Dina Vita Maratilova, S.H., M.H.	Head of career development sub-division (DIKLAT alumni 2018 & as a supervisor of Bintaria)
8.	Diyah Ayu Mustika Ratri, S.E., M.Ec., Dev.	Head of finance, planning, evaluating and reporting sub-division (DIKLAT alumni 2018 & as a supervisor of Evi Zulfiah)
9.	Evi Zulfiah, S.E.	Accounting administrator (DIKLAT alumni 2018)

10.	Bintaria Aulia Kumara, S.STP.	Human resources analyst (DIKLAT alumni 2018)

Based on the table above, the head of DIKLAT department who also as a temporarily secretary is chosen as the informant or data unit analysis because he is responsible for the DIKLAT field and assists the head of BKPP in secretarial matters. Then, Head of ASN development department chosen because he has responsibility about ASN development, and he was also joined DIKLAT in 2018. Meanwhile, the head of the ASN mutation and coaching department is chosen because one of his duties is responsible for monitoring and evaluating employee performance. In addition, the person is one of the DIKLAT alumni and as the boss of Andriana Widiantari as one of the DIKLAT alumni in 2018. Therefore, the head of the ASN mutation and coaching department is authorized to assess the performance of his subordinate.

Moreover, the head of DIKLAT organizing sub-division and the head of DIKLAT control and development sub-division are chosen as data unit analysis because the person is responsible for the implementation of DIKLAT and post-DIKLAT evaluation. They are responsible for carrying out the preparation of policy formulation materials, coordination, guidance, control and providing guidance for activities in the field of DIKLAT administration and activities in the field of controlling and developing DIKLAT.

Furthermore, other informants are Andriana Widiantari, Evi Zulfiah, and chosen because they were joined DIKLAT morethan once in 2018 and each of them represent as a participant in some of DIKLAT such as, SIPKD (responsibility implementation), SAKD DIKLAT, E-Kinerja DIKLAT, and Government goods/service procurement DIKLAT. Then, Dyah Ayu Mustika Ratri chosen because she was joined DIKLAT morethan once and also she is as a superior that have authority to do assessment to Evi Zulfiah. Thus, se could give the proven statement about Evi Zulfiah performance. Then, Bintaria Aulia Kumara chosen because she represents as a participant in personnel management DIKLAT because the other staff who joined in personnel management DIKLAT already moved to another organization. Meanwhile, Dina Vita Maratilova chosen because she was joined e-kinerja DIKLAT and she is also as the supervisor of Bintaria Aulia Kumara that authorized to provide an assessment of her subordinates and coworkers.

b) Secondary Data

Secondary data is the data that comes from a second source or from an institution or document. According to Sugiyono (2016), secondary data is the data to support primary data. In the other words, all data sources used in this study came from two sources, namely primary data and secondary data. The secondary data whose sources data was obtained from documentation, in the form of documents from institutions and websites, notes, photographs and observations. The data were also obtained from books and journals that discuss the relationship between DIKLAT to

employee productivity. This data was obtained from the previous research which is in accordance with this study.

Moreover, there are data from some of the staffs in BKPP of Yogyakarta city in the form of a number of documents, namely the list of participants of DIKLAT 2018, data on the names of trainers and material in DIKLAT 2018, the Training Needs Analysis (TNA) document 2017, data on the achievements of Employee Performance Targets (SKP) of employees in BKPP of Yogyakarta City 2018 and 2019, and the DIKLAT in 2018 evaluation and post- DIKLAT evaluation document.

3. Data Collection Techniques

In this study, the data collection techniques use a strategy that is combined. To get a broader and deeper understanding of the social situation under study, the data collection techniques are triangulation, which uses a variety of data collection techniques combined / simultaneously (Sugiyono, 2016, p. 8). This study obtained the primary data from informants in the BKPP office, after all aspects have been obtained, the researcher collected and understood to ensure data or cross validation. In addition, the researcher observed the behavior of the ASN who had joined DIKLAT based on the document list of the participants in DIKLAT on 2018 (secondary data), and then the researcher also saw the secondary data that can be documents related to support the data that has been collected before. The data collection in this study will be conducted by interview, observation and documentation.

a) Interview

Interviews were conducted in this study to find answers to problems. Interview is the process of direct interaction or conversation between the researcher and data sources or informants with or without using interview guidelines (Rahardjo, 2011). In this data collection technique, the technique was through question and answer directly with informants to obtain additional information related to research. To avoid mistakes in interpreting or forgetting the results of interviews, the researcher used handphone to record every detail of the conversation, so it can be used and listened to whenever needed.

b) Observation

According to Marshall (2011) in Sugiyono (2016), through doing observation the researcher can learn about the behavior, and the meaning of the behavior. The importance of observation is to determine the initial factors of behavior and ability to accurately describe individual reactions that are observed in certain conditions (Komariah & Satori, 2010). Observations were made to get and see firsthand how the daily performance and productivity behavior of employees in the BKPP Office. The observations at BKPP office of Yogyakarta was did by the researcher since 08 January 2020 until 31 January 2020. From the observations the researchers observed the behavior of the employees and the daily performance of employees starting from what time employees came to the office, what time employees left the office, how to coordinate with superiors

and colleagues, how employees provide services to ASN and the general public.

c) Documentation

Furthermore, information can also be obtained through facts stored in the form of document, letters, diaries, photo archives, meeting results, souvenirs, and activity journals. The documentation includes secondary data obtained from books, journals, news, legal documents, and others (Rahardjo,2011). The documentation study is the collection of documents and data needed in research problems, which can then be studied further in order to support and increase trust and become evidence in an event (Komariah & Satori, 2010). When it has done the documentation, the researcher selected, reviewed through notes and interpreted them based on research criteria.

4. Data Analysis Techniques

The data analysis technique is a process for finding data and compiling data systematically obtained from interviews, observation, and documentation, by organizing data into several categories, describing into units, synthesizing, organizing into patterns, choosing which are important and will studied, and make conclusions that can be conveyed to others (Sugiyono, 2016, p.244). The data analysis based on Miles and Huberman model is done at the time the data collection takes place, and after the completion of data collection within a certain period (Miles, Huberman, & Saldana, 2019). The activities in qualitative analysis are carried out

interactively and continue continuously until completion, to obtain incredible data.

In this study, the researcher used a model of data analysis techniques by Miles and Huberman explained by (Sugiyono, 2016) in a book on qualitative research methods. The data analysis techniques include data collection, data reduction, data display, and conclusion. All analysis obtained during the study collected. All existing data will be studied and dissected in detail. At this stage, the relevant data were selected which is appropriate and focus on the chosen topic. The data deemed not supportive of the discussion discarded. After the data is reduced, the data entered or presented (data display).

In the data display, all the data that has been filtered or selected in the previous step. With data displays it is easier to find patterns in research. Therefore, it is easier for researcher to analyze existing data. In making data displays, researchers convert the data into narratives, graphs, and matrices (Sugiyono, 2016). After the data display, the next step is the conclusion. The conclusions in each qualitative study are new findings. New findings are findings from truly new research or from research developed from previous studies.

5. Location

The location for this research is in the Office of BKPP of Yogyakarta City. The researcher took the location of the Yogyakarta City BKPP Office because the BKPP office is an office that has the task of supporting the

implementation of regional government affairs based on the principle of autonomy and assistance tasks in the field of staffing, DIKLAT and as the ASN data center in Yogyakarta City. Hence, HRM in the office should be a role model for other agencies. In addition, in the previous research, there was no discussion about the relationship between DIKLAT with ASN productivity at the BKPP Office. The researcher chose the location of the Yogyakarta City BKPP Office so that the study was more focused especially on employees in BKPP who joined DIKLAT in 2018 hose scope was not too broad because of the researcher's limitations.